The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte PAUL MAGEE, GARY A. GANGER, PAUL H. STEPHAN, RICHARD F. SCHLEGELMILCH, DAVID A. BARKER, DANIEL J. DELANEY, and ALEX THERRIEN

Appeal 2006-3297
Application 09/778,604
Technology Center 3600

Decided: August 16, 2007

Before MURRIEL E. CRAWFORD, LINDA E. HORNER, and JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the Examiner's rejections of claims 1-43. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE and REMAND.

THE INVENTION

The Appellants' claimed invention is to an automated financial transaction machine and method which includes a user interface that adjusts to facilitate use by the particular user operating the machine (Specification 1:2-5). In particular, the ATM includes a reading device that is capable of sensing a characteristic feature of a user, such as the user's account number or a biometric feature of the user (Specification 5:6-9). The ATM also includes a display screen which serves as an output device and may also serve as an input device, e.g., a touch screen (Specification 5:10-13). The ATM further includes a movement mechanism, which is selectively operative to change the position of the display screen, e.g., vertical height and tilt angle (Specification 5:14-16). The ATM machine is in operative connection with a computer that includes a data store (Specification 5:19-20). The data store includes a characteristic feature for each of a plurality of users and data representative of at least one interface parameter associated with each user or category of users (Specification 5:21-6:3). The interface parameters control operation of the user interface of the ATM (Specification 6:3-4). For

example, the interface parameter might control the position of the display screen of the ATM machine, so that the computer causes the movement mechanism to adjust the height and/or tilt angle of the display screen for a particular user (Specification 6:5-12). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method comprising:

a) storing in at least one data store in operative connection with at least one computer, data corresponding to a plurality of users, and for each one of the plurality of users, at least one characteristic feature and at least one interface parameter;

b) sensing with a reading device in operative connection with an automated financial transaction apparatus, at least one characteristic feature of a user adjacent to the apparatus;

c) determining through operation of the computer responsive to the at least one characteristic feature, the at least one interface parameter associated with the user in the data store;

d) moving through operation of the computer, a display screen included on the automated financial transaction apparatus with a moving device responsive to the at least one interface parameter associated with the user.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Blumstein	US 5,589,855	Dec. 31, 1996
Drummond	WO 98/24041	Jun. 4, 1998
Ramachandran	US 6,023,688	Feb. 8, 2000

The following rejections are before us for review:

1. Claim 1 stands rejected under 35 U.S.C. § 102(b) as anticipated by Drummond.
2. Claims 2-23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Drummond and Blumstein.
3. Claims 24-31 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Drummond, Blumstein, and Ramachandran.
4. Claims 32 and 37-43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ramachandran.
5. Claims 33-36 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ramachandran and Drummond.

ISSUES

The first issue before us is whether the Appellants have shown that the Examiner erred in finding that Drummond anticipates claim 1. This first issue focuses on whether Drummond discloses the claimed step of moving a display screen with a moving device responsive to an interface parameter associated with a user. The second issue before us is whether the Appellants have shown that the Examiner erred in finding that Drummond and Blumstein, or Drummond,

Blumstein, and Ramachandran, or Ramachandran taken alone, or Ramachandran and Drummond render obvious the subject matter of claims 2-37. This second issue focuses on whether the references taken alone or considered in combination, as relied upon by the Examiner, would have led one having ordinary skill in the art to an apparatus or method that includes moving the display screen responsive an interface parameter associated with a user. The third issue before us is whether the Appellants have shown that the Examiner failed to set forth a prima facie case of obviousness to show that Ramachandran renders obvious the subject matter of claims 38-43.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7 USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Drummond relates to an automated banking machine which provides a user with a familiar interface from the user's home institution at banking machines operated by other institutions (Drummond 1:3-7).
2. Drummond explains that if a user uses an ATM operated by a bank with which the user is not a customer, the user's card data will include indicia corresponding to a URL address that does not correspond to the home server (Drummond 27:4-11).

3. Drummond explains that in this case, the system sends a message addressed to the URL address that corresponds to the indicia on the user's card to a proxy server, which in turn passes the message to a wide area network, and then on to a foreign server corresponding to the user's URL address (Drummond 27:11-17).
4. As such, the system of Drummond will present a user interface from the user's own banking institution even when the user uses an ATM provided by another banking institution (Drummond 28:10-14).
5. In one embodiment, the interface can be tailored specifically to the needs of a particular user (Drummond 28:13-14).
6. Drummond does not disclose moving a display screen with a moving device responsive to an interface parameter associated with a user.
7. Blumstein discloses a financial transaction method and system for visually impaired, blind, and learning disabled individuals (Blumstein, col. 1, ll. 9-11).
8. Blumstein discloses that in the banking environment several changes have been made to assist individuals with disabilities, including configuring ATMs to make them accessible to individuals in wheelchairs (Blumstein, col. 1, ll. 41-43).
9. Blumstein teaches dividing a conventional ATM touch screen display into quadrants representing large "buttons" which the user touches to interact with the ATM (Blumstein, col. 2, ll. 8-11).

10. Blumstein teaches that a user can enter the visually-impaired mode by touching the upper right quadrant twice in succession (Blumstein, col. 2, ll. 23-26).
11. Blumstein does not disclose moving a display screen with a moving device responsive to an interface parameter associated with a user.
12. Ramachandran discloses a financial transaction apparatus that identifies an authorized user based on a user's appearance and voice (Ramachandran, col. 1, ll. 11-12).
13. Ramachandran discloses that the apparatus includes an imaging device, such as a camera, for providing image input signals (Ramachandran, col. 3, ll. 27-29).
14. Ramachandran discloses that the apparatus also includes an audio input device, such as a microphone, for providing audio input signals (Ramachandran, col. 3, ll. 29-30 and col. 5, ll. 41-44).
15. Ramachandran states, "The orientation of the camera 50 on the terminal 32 is such that it centers its field of view on the face of the user and the software operates to adjust the field of view so as to capture image data centered about the user's face" (Ramachandran, col. 10, ll. 12-16).
16. Ramachandran does not teach or suggest moving a display screen with a moving device responsive to an interface parameter associated with a user.

PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

ANALYSIS

Anticipation

The Examiner rejected claim 1 as anticipated by Drummond and found that Drummond discloses all of the elements of claim 1, including the step of "moving

through operation of the computer, a display screen included on the automated financial transaction apparatus with a moving device responsive to the at least one interface parameter associated with the user" (Answer 4, citing Drummond, p. 26, l. 8 – p. 27, l. 25). In particular, the Examiner broadly interpreted this claim language to include changing the user interface displayed to the user, as disclosed in Drummond (Answer 21-22). The Appellant argues that Drummond does not teach moving a display screen in the manner recited in claim 1 (Appeal Br. 12, Reply Br. 8-9). We agree with the Appellants.

Drummond relates to an automated banking machine which provides a user with a familiar interface from the user's home institution at banking machines operated by other institutions (Finding of Fact 1). When a customer uses an ATM operated by a bank with which the user is not a customer, the system sends a message over a wide area network to a foreign server corresponding to the customer's bank (Findings of Fact 2-3). As such, the system of Drummond will present a user interface from the user's own banking institution even when the user uses an ATM provided by another banking institution (Finding of Fact 4). Although Drummond discloses tailoring the user interface specifically to the needs of a particular user (Finding of Fact 5), Drummond does not disclose moving, through operation of a computer, a display screen with a moving device responsive to an interface parameter associated with a user (Finding of Fact 6). As such, we do not sustain the Examiner's rejection of claim 1.

Obviousness

The Examiner rejected claims 2-23 as unpatentable over Drummond and Blumstein and claims 24-31 as unpatentable over Drummond, Blumstein and Ramachandran. Claims 2-31 depend from independent claim 1 and thus also include the limitation of moving a display screen with a moving device responsive to an interface parameter associated with a user.

Blumstein discloses a financial transaction method and system for visually impaired, blind, and learning disabled individuals (Finding of Fact 7). The Examiner found that Blumstein discloses changing the height or tilt angle of a display screen (Answer 5, citing Blumstein, col. 1, ll. 41-43, col. 3, ll. 1-27 and ll. 52-53). Although Blumstein discloses in the background of the invention that banks have made changes to ATMs to make them accessible to individuals in wheelchairs (Finding of Fact 8), Blumstein does not suggest that these changes include moving, through operation of a computer, the display screen of an ATM responsive to an interface parameter associated with the user. One can imagine that the change referred to by Blumstein might be as simple as positioning the entire ATM machine at a lower overall height. Blumstein does not elaborate on these prior art ATMs, and the Examiner's reading of this sentence in Blumstein as disclosing moving through operation of a computer the display screen for a particular user is speculative.

The main focus of Blumstein is to divide the screen of a conventional ATM touch screen display into quadrants representing large "buttons" which the user touches to interact with the ATM (Finding of Fact 9). Blumstein teaches that a

user can enter the visually-impaired mode by touching the upper right quadrant twice in succession (Finding of Fact 10). Blumstein does not disclose or suggest, however, moving a display screen with a moving device responsive to an interface parameter associated with a user (Finding of Fact 11).

Ramachandran discloses a financial transaction apparatus that identifies an authorized user based on a user's appearance and voice (Finding of Fact 12). Ramachandran discloses that the apparatus includes an imaging device, such as a camera, for providing image input signals and an audio input device, such as a microphone, for providing audio input signals (Findings of Fact 13 & 14). The Examiner found that Ramachandran discloses a movement mechanism in operative connection with a movably mounted display screen (Answer 15, citing Ramachandran, col. 5, ll. 36-39). In the passage relied on by the Examiner, however, Ramachandran teaches orienting the camera so that it centers its field of view on the face of the user so as to capture image data of the user (Finding of Fact 15). The camera of Ramachandran is an input device (Finding of Fact 13) and not a display screen. As such, Ramachandran does not teach or suggest moving a display screen with a moving device responsive to an interface parameter associated with a user (Finding of Fact 16).

Neither Blumstein nor Ramachandran cure the deficiencies of Drummond, and as such, the combination of Drummond and Blumstein would not have led one having ordinary skill in the art to the subject matter of claims 2-23, and the combination of Drummond, Blumstein, and Ramachandran would not have led one

having ordinary skill in the art to the subject matter of claims 24-31. Accordingly, we do not sustain the Examiner's rejections of claims 2-31.

The Examiner also rejected claims 32, 37, and 38-43 as unpatentable over Ramachandran and claims 33-36 as unpatentable over Ramachandran and Drummond. Claims 32-37 are directed to an automated financial transaction apparatus and contain claim limitations similar to method claim 1. In particular, independent claim 32 recites, "a movably mounted display screen," "a movement mechanism in operative connection with the display screen," and "wherein the computer is operative to cause the movement mechanism to move the display screen responsive to at least one interface parameter associated in the data store with a first user." Independent claim 37 similarly recites, "a movably mounted display screen," "a movement mechanism in operative connection with the display screen," and "wherein the computer is operative ... to cause the movement mechanism to move the display screen to a position corresponding to an interface parameter associated in the data store with the first characteristic feature." For the same reasons provided *supra* for claim 1, we find that neither Ramachandran alone, nor Ramachandran in combination with Drummond, would have led one having ordinary skill in the art to an automated financial transaction apparatus having a movably mounted display screen and a movement mechanism that moves the display screen, under operation of a computer, based on an interface parameter associated with a user. As such, we do not sustain the Examiner's rejections of claims 32-37.

Unlike claims 1, 32, and 37, independent claim 38 does not contain the limitation of a display screen that is moved in response to an interface parameter associated with a user. Rather, independent claim 38 recites, "at least one computer ... operative responsive to the device receiving data indicative of at least one first user characteristic feature, ... to cause the display screen to selectively either operate or not operate responsive to the at least one first user interface parameter." The Examiner did not provide any separate treatment for independent claim 38 in the Answer. Rather, the Examiner based the rejection of claim 38 on the same rationale as provided for claims 32 and 37 (Answer 16, 34-35). The Appellant argues that the Examiner has not provided a prima facie showing of obviousness for claim 38, because the Examiner has failed to explain where Ramachandran teaches or suggests the recited features of the claim (Appeal Br. 23-24, Reply Br. 24). We agree with the Appellants.

The Examiner, by treating claim 38 in the same manner as claims 32 and 37, failed to take into account the different claim limitations present in claim 38. As such, the Examiner has failed to set forth a prima facie case of obviousness of independent claim 38 and its dependent claims 39-43. Accordingly, we do not sustain the Examiner's rejection of claims 38-43.

REMAND

We remand this application to the Examiner for consideration of Vance (U.S. Patent No. 6,131,874; issued October 17, 2000). Vance discloses an information display system having a display monitor 35, a tilting display head 32,

and a tilt motor 33 (Vance, col. 2, ll. 17-20). Vance describes, with reference to the embodiment of Figure 3:

> In operation of the third embodiment, a user approaches the kiosk and the display head 32 will automatically adjust to the height of the user's eyes, so that the display monitor 35 is in clear view of the user to see and operate. Such adjustment is achieved by means of the camera 34 tracking the user, by detecting the user's head shape and/or eye blinking. This activates the tilt motor 33 which adjusts the display head 32 by pivoting about a substantially horizontal axis until the camera 34 has focused on the user's eyes.

(Vance, col. 2, ll. 34-42.) Vance describes that the object of the invention is to "allow a variable angle for use, which is more suited to human ergonomics and enables the display head with its built-in camera to be titled in the most suitable position for the user to view" (Vance, col. 1, ll. 20-23). As such, it appears that Vance discloses a kiosk, akin to an ATM machine, that uses a characteristic feature of the user, such as the user's height, to move a display screen. It does not appear that the system of Vance stores characteristic feature and interface parameter data for a plurality of users. Rather, Vance's system appears to assess the characteristic feature information in real-time as the user stands in front of the kiosk using an adjustable camera. As such, we remand this application to the Examiner to consider whether any of the subject matter of the pending claims would have been obvious to one having ordinary skill in the art at the time of the invention in view of the teachings of Vance in combination with other pertinent art of which the Examiner is or becomes aware.

CONCLUSIONS OF LAW

The Appellants have shown that the Examiner erred in rejecting claim 1 as anticipated by Drummond, claims 2-23 as unpatentable over Drummond and Blumstein, claims 24-31 as unpatentable over Drummond, Blumstein, and Ramachandran, claims 32 and 37-43 as unpatentable over Ramachandran, and claims 33-36 as unpatentable over Ramachandran and Drummond.

DECISION

The decision of the Examiner to reject claims 1-43 is reversed. The application is remanded to the Examiner pursuant to 37 C.F.R. § 41.50(a)(1) (2006) for consideration of further prior art.

REVERSED AND REMANDED

jlb

RALPH E. JOCKE
WALKER & JOCKE LPA
231 SOUTH BROADWAY
MEDINA OH 44256